Quiz 8 – Take Home

Beef v. Chicken

Name:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

|  |  |  |
| --- | --- | --- |
| **Average Annual US Per-Person Consumption of Chicken and Red Meat** | | |
|  | **Average Annual Consumption (pounds per person)** | |
| Year | Chicken | Red Meat |
| 1970 | 27.4 | 131.9 |
| 1975 | 26.3 | 125.8 |
| 1980 | 32.7 | 126.4 |
| 1985 | 36.4 | 124.9 |
| 1990 | 42.4 | 112.2 |
| 1995 | 48.2 | 113.6 |
| 2000 | 54.2 | 113.7 |
| 2005 | 60.4 | 110.0 |

C:\Program Files\Microsoft Office\MEDIA\CAGCAT10\j0149627.wmf

Based on the data, predict when the annual consumption of chicken will surpass beef consumption.

Task – Solve this equation three ways –

1. Create a graph and use line of best fit to predict out into the future – you may need to attach another piece of paper. Figure out where the lines cross. This is the graphical solution.
2. Create two equations. One for chicken, one for red meat.
   1. Use susbtitution to solve this system of equations
   2. Use elimination to solve this system of equations.
3. Communicate your answers. How did they differ? Which did you think was best?